WHAT IS CLAIMED IS:

1. A compound of the formula I:

Ι

5

wherein:

R1 is selected from the group consisting of:

- (1) hydrogen,
- 10 (2) -C₁-6alkyl, -C₂-6alkenyl, -C₂-6alkynyl, or -C₃-8cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
 - (a) halo,
 - (b) hydroxy,
 - (c) -O-C₁₋₆alkyl,
 - (d) -C3-6cycloalkyl,
 - (e) phenyl or biphenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
 - (i) -C₁₋₆alkyl,
 - (ii) -C3-6cycloalkyl,
 - (iii) -O-C₁₋₆alkyl,
 - (iv) halo,
 - (v) hydroxy,
 - (vi) -CF₃,
 - (vii) -OCF₃,
 - (viii) -NR9R10, and
 - (ix) -CN,

20

15

		(1)	-CO ₂	2R9, wherein R9 is independently selected from:		
			(i)	hydrogen,		
			(ii)	-C ₁₋₆ alkyl, which is unsubstituted or substituted with 1-6 fluoro		
_			(iii)	benzyl, and		
5			(iv)	phenyl,		
		(g)	-NR ⁹	$^{2}\mathrm{R}^{10}$, wherein R^{10} is independently selected from:		
			(i)	hydrogen,		
			(ii)	-C ₁₋₆ alkyl, which is unsubstituted or substituted with 1-6 fluoro,		
			(iii)	benzyl, and		
10			(iv)	phenyl,		
		(h)	-CON	7R9R10,		
	(3)	phenyl which is unsubstituted or substituted with 1-5 substituents where the				
		subst	ituents a	are independently selected from:		
		(a)		salkyl,		
15		(b)	-C ₁₋₆	salkyl-phenyl,		
		(c)	-C3-6	cycloalkyl,		
		(d)	-O-C	1-6alkyl,		
		(e)	halo,			
		(f)	hydro	xy,		
20		(g)	-CF ₃ ,			
		(h)	-OCF	3,		
		(i)	-NR9	R10, and		
		(j)	-CN;			
25	R ² is selected	l from t	he grou	n consisting of		
	R ² is selected from the group consisting of: (1) hydrogen,					
	(2)	R4-S(O) _p -, wherein R4 is independently selected from the group consisting of:				
		***11010	(a)	-C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro,		
30			(b)			
			(c)	phenyl, and		
		and w		benzyl,		
	(3)	and wherein p is independently 0, 1, or 2, R^4 -S(O) _p N(R^5)-,				
		where	in R ⁵ is	independently selected from the group consisting of		

- (a) hydrogen,
- (b) -C₁-6alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (c) phenyl, and
- (d) benzyl,

5

- (4) -CN,
- (5) -C₁-6alkyl-CN,
- (6) halogen,

(7)

10

15

wherein R8a and R8b are independently selected from the group consisting of:

- (a) hydrogen,
- (b) -CN,
- (c) halo,
- (d) -C₁-6alkyl,
- (e) -O-R5,
- (f) -S-R⁵,
- (g) -CO₂R⁵, and
- (h) tetrazolyl,

(8)

(h) CN

20

25

wherein n is 1, 2, 3 or 4;

 $\ensuremath{R^3}$ is selected from the group consisting of:

- (1) -CH(OH)-R6,
- (2) -C(O)R6,
 - (3) -CH(R6)-NR7R9, and
 - (4) $-C(O)-NR^{7}R^{9}$;

 R^6 is independently selected from the group consisting of:

30

(1) hydrogen

(2) C_{1-6} alkyl,

(3)

$$\xi$$
 N
 H
, and

5 (4)

wherein Z is selected from the group consisting of -C(O)-, -CH(OH)-, and

and wherein q is 1 or 2;

10

15

 R^7 is selected from the group consisting of :

- (1) hydrogen,
- (2) -C₁-6alkyl, -C₂-6alkenyl, -C₂-6alkynyl, or -C₃-8cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
 - (a) halo,
 - (b) hydroxy,
 - (c) -O-C₁-6alkyl,
 - (d) -C₃-6cycloalkyl,
- 20 (e) phenyl or hinhe
 - (e) phenyl or biphenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
 - (i) -C₁-6alkyl,
 - (ii) -C3-6cycloalkyl,
 - (iii) -O-C₁₋₆alkyl,
 - (iv) halo,
 - (v) hydroxy,

```
-CF<sub>3</sub>,
                                 (vi)
                                 (vii) -OCF<sub>3</sub>,
                                 (viii) -NR9R10, and
                                 (ix)
                                         -CN,
  5
                                 -CO_2R^9,
                         (f)
                                 -NR9R10
                        (g)
                                 -CONR9R10,
                        (h)
                (3)
                        -CHR5-CONR9R10,
                        phenyl which is unsubstituted or substituted with 1-5 substituents where the
                (4)
 10
                        substituents are independently selected from:
                        (a)
                                -C<sub>1</sub>-6alkyl,
                                -C<sub>1-6</sub>alkyl-phenyl,
                        (b)
                                -C3-6cycloalkyl,
                        (c)
                                -O-C<sub>1-6</sub>alkyl,
                        (d)
15
                       (e)
                                halo,
                                hydroxy,
                       (f)
                               -CF<sub>3</sub>,
                       (g)
                               -OCF<sub>3</sub>,
                       (h)
                       (i)
                               -NR9R10, and
20
                       (j)
                               -CN;
```

m is independently 1, 2, 3 or 4; and pharmaceutically acceptable salts thereof.

		2.	The c	compound of Claim 1 wherein R ¹ is selected from the group		
	consisting of:			as a serious from the group		
	(1)	hydro	gen,			
	(2)	-C1-6alkyl, which is unsubstituted or substituted with 1-7 substituents where the				
5		substituents are independently selected from:				
		(a)	halo,			
		(b)	hydroxy,			
		(c)	-O-C ₁₋₆ alkyl,			
		(d)	-C ₃₋₆ cycloalkyl,			
10		(e)	pheny	l or biphenyl, which is unsubstituted or substituted with 1-5		
			substi	tuents where the substituents are independently selected from:		
			(i)	-C ₁₋₆ alkyl,		
			(ii)	-C ₃₋₆ cycloalkyl,		
			(iii)	-O-C ₁₋₆ alkyl,		
15			(iv)	halo,		
			(v)	hydroxy,		
			(vi)	-CF ₃ ,		
			(vii)	-OCF ₃ ,		
			(viii)	-NR ⁹ R ¹⁰ , and		
20			(ix)	-CN,		
		(f)	-CO ₂ F	R^9 , wherein R^9 is independently selected from:		
			(i)	hydrogen,		
			(ii)	-C ₁ -6alkyl, which is unsubstituted or substituted with 1-6 fluoro,		
25			(iii)	benzyl, and		
25			(iv)	phenyl,		
		(g)		${ m R}^{10}$, wherein ${ m R}^{10}$ is independently selected from:		
				hydrogen,		
			(ii)	-C ₁ -6alkyl, which is unsubstituted or substituted with 1-6 fluoro,		
20			(iii)	benzyl, and		
30			(iv)	phenyl,		
		(h)	-CONF	·		
	(3) ₁	phenyl which is unsubstituted or substituted with 1-5 substituents where the				
	\$	substituents are independently selected from:				
	((a)	-C ₁ -6a	lkyl,		

(b) -C₁-6alkyl-phenyl, (c) -C3-6cycloalkyl, (d) -O-C₁₋₆alkyl, (e) halo, 5 (f) hydroxy, -CF₃, (g) (h) -OCF₃, -NR9R10, and (i) (j) -CN. 10 The compound of Claim 1 wherein R^1 is selected from the group 3. consisting of: (1) hydrogen, (2) methyl, 15 (3) isopropyl, (4) isobutyl, and (5) phenyl. The compound of Claim 1 wherein R2 is: 4. $R^{4}-S(O)_{2}N(R^{5})-$ 20 wherein R4 is independently selected from the group consisting of: -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (a) (b) phenyl, and (c) benzyl, and wherein R^5 is independently selected from the group consisting of: 25 (a) hydrogen, -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (b) (c) phenyl, and (d) benzyl. 30 5. The compound of Claim 1 wherein R2 is CH3-S(O)2N(CH3)-.

- 6. The compound of Claim 1 wherein R³ is selected from the group consisting of:
 - (1) -CH(OH)-R6,
 - (2) -C(O)R6, and
- (3) $-CH(R^6)-NR^7R^9$.

5

10

7. The compound of Claim 1 wherein R6 is:

and wherein n is 2 or 3, and R⁵ is hydrogen or methyl.

8. The compound of Claim 1 wherein R6 is:

wherein R⁵ is hydrogen or methyl, and Z is selected from the group consisting of -C(O)-, -CH(OH)-, and

- 9. The compound of Claim 1 wherein R³ is selected from the group consisting of:
 - (1) -CH2-OH, and
- 20 (2) -CH₂-NH-CH(CH₂CH₃)-CO-NH-CH₂CH(CH₃)₂.
 - 10. The compound of Claim 1 wherein m is 1.
 - 11. The compound of Claim 1 wherein m is 2.

12. A compound which is selected from the group consisting of:

5

and pharmaceutically acceptable salts thereof.

10

15

- 5 13. A pharmaceutical composition comprising an effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.
 - 14. A method for inhibition of β -secretase activity in a mammal in need thereof which comprises administering to the mammal a therapeutically effective amount of a compound of Claim 1.
 - 15. A method for treating, preventing, controlling, ameliorating or reducing the risk of Alzheimers disease in a patient in need thereof comprising administering to the patient an effective amount of a compound of Claim 1.